



Click and Move remote positioning system
for headlights

Instruction manual V1.0

Fabrication and marketing
Licht-Technik

Hagenbach & Grill

Osterwaldstr. 9-10 80805 München

Phone: +49 89 3605280 Fax +49 89 36052830

E-mail: info@Licht-Technik.com

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Caution! Operate the device only after having read and **understood** operating instructions!

Click and Move remote positioning system for headlights

Click and Move is a simple, easy and self explanatory system for remote headlight positioning. The set-up is very quick. Pan, tilt and focus can be motorized.

The system is controlled with the wired remote control **Vision Control**. Optionally the wireless control system LT-Pilot can be used.

It is possible to operate up to **four** systems with one controller (wired or wireless) with the distribution device MuxBox.

The headlight can be mounted **hanging** or **standing**.

The wired system can operate in **distances** up to 120m, the wireless system can be 250m (line of sight) away.

All devices are **splashproof**. It can be used in moderate rain.

The **FINE-key** with lock function enables an exact positioning of pan and tilt.

The **shutter** control has three LEDs to indicate the position of the shutter. One LED for each endpoint (complete open, complete closed) and another one for the blackout state.

The **FLASH** and **BLACKOUT** keys open respectively close the shutter.

Table of content

Click and Move remote positioning system for headlights.....	3
Safety- and operating instructions.....	5
System components.....	7
Setup.....	8
Cabling.....	11
User interface elements Vision Control.....	13
Key lock.....	13
DMX addressing shutter.....	14
Start up.....	14
Technical data.....	15
Malfunctions.....	16
Warranty.....	17
Further information.....	17

Safety- and operating instructions

Before opening the housing disconnect the device from the mains !!!

Do **not** try in any case to **touch** the electronic through openings, also with any objects. This can cause an **electrical accident** that can lead to death!

Admissible **ambient temperature**: 0..+55 degree Celsius.

The housing is **splashproof**. Do not use the system in heavy rain.

Close the **covers** of unused connectors.

In case of water **condensation** a waiting period of 2 hours is necessary until the state of being acclimatised is reached.

Make sure that all parts are **firmly connected**. Use **safety belts**.

Make sure that all **locking bolts** are inserted and all wingnuts are fastened.

Before using the tilt function **loose** the tilt screw of the lamp.

Use only clamps which are in **good condition**, especially the screws and bolts.

The power supply of the motors and Vision Control must only be done by the Licht-Technik **PSU120**.

The power supply is a **switching device** which provides high reliability and low heat. It is short circuit protected and overload proofed.

Observe mains input voltage:

93..132 VAC 60Hz **or** 187..264 VAC 50Hz. Never change the input range during power on. See also generator operation.

When operating the system with a **generator**, first start the generator, after that switch on the Click and Move system. Never start the generator when the devices are connected and switched on.

Replace **fuses** always with the same value. Never short the fuse. Values of fuses are indicated on the front plate.

The **housings** are made of 2mm powder coated aluminium.

All axis have built in **electronical torque limiters**. That means the motors automatically switch off in case of overload. The pan axis has a mechanical **friction clutch** in addition.

Observe the **tilt rope**. These axis can not be switched off, when unwinding. When proceeding with unwinding, the rope will be wound up in the other direction. The rope can be damaged seriously in this situation.

It is **not necessary** to use all motors. It is possible to use one, two or three motors. It does not matter which axis is used.

When it has to be assumed that a **safe operation** is no longer possible, the equipment must be switched off immediately and be secured against unintended operation.

This is the case when

- the equipment shows visible damages;
- the equipment is no longer functional;
- parts of the equipment are loose or slackened;
- connecting lines show visible damages.

Before starting the equipment the user must check the usefulness of the device for its intended purpose. In particular, Licht-Technik shall decline any liability for damages of the equipment as well as for consequential damages resulting from the device being used inappropriately, of inexperienced installation, incorrect starting and use, and of non-compliance with the valid safety regulations.

System components



Power supply with motor electronic



MuxBox (for 2 up to 4 systems)



Wired remote control



Pan motor and gearbox



Tilt motor and gearbox



Focus motor and gearbox



Rigg adapter



Case view



Different Focus adapters

In addition:
- 4pin XLR-cable
- This manual

Setup

Pan:

The pan drive is put between the spigot of the lamp and the stand respectively the rigg adapter.

Do not forget the safety bolt.



Pan drive, standing version

When mounted hanging, the rigg adapter is used:



Rigg adapter



Rigg Adapter mounted



Pan drive, hanging version

Tilt:

The tilt axis is driven by the rope. First make sure, that the tilt lock of the lamp is loose. Check if the lamp is falling in a direction. Normally a front falling is advantageous for the drive. If the lamp is not or not enough falling, adjust the balance of the lamp. If this is not possible, check if an additional weight may help to get a disbalance. Now unwind the rope and mount it in a way so that the lamp will be pulled up.

The reel can be released by pulling it away from the motor. Now the rope can be unwinded manually.



Tilt drive, standing version



Tilt drive, hanging version

Please note:
Depending of the winding direction, the UP/DOWN keys can be interchanged!

Focus:

The focus drive has different adapters for the different lamps-knobs. The adapters are mounted on the motorshaft and fastened with the bolt.



When mounting, make sure that the focus shaft is in alignment with the motor shaft and the mounting shaft is straight vertical.

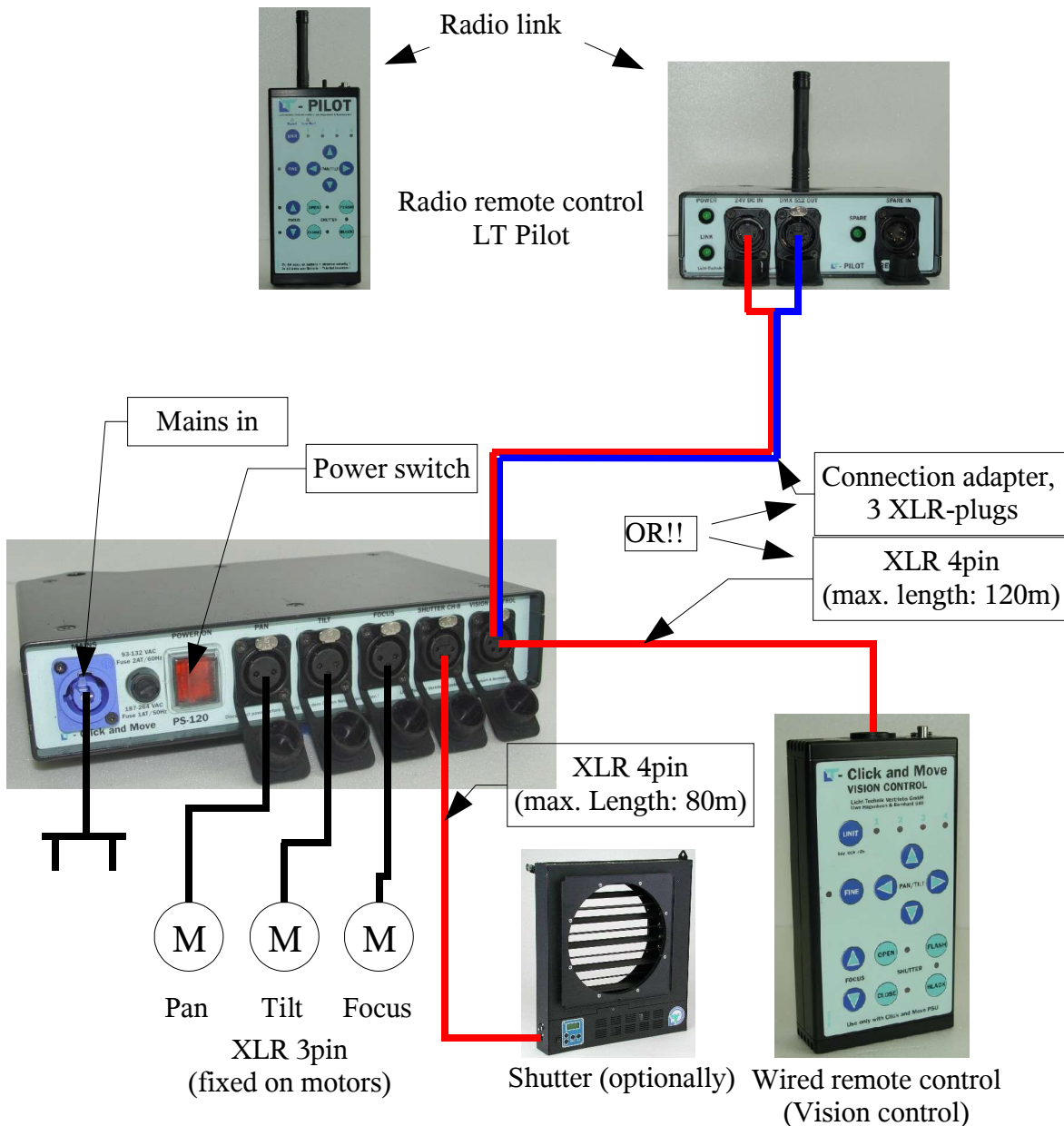


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Cabling

Cable the system in power off state. Observe the indication of the plugs on the devices.

Cabling with one Click and Move system (one lamp) and wired remote control *OR* radio remote control (LT Pilot):

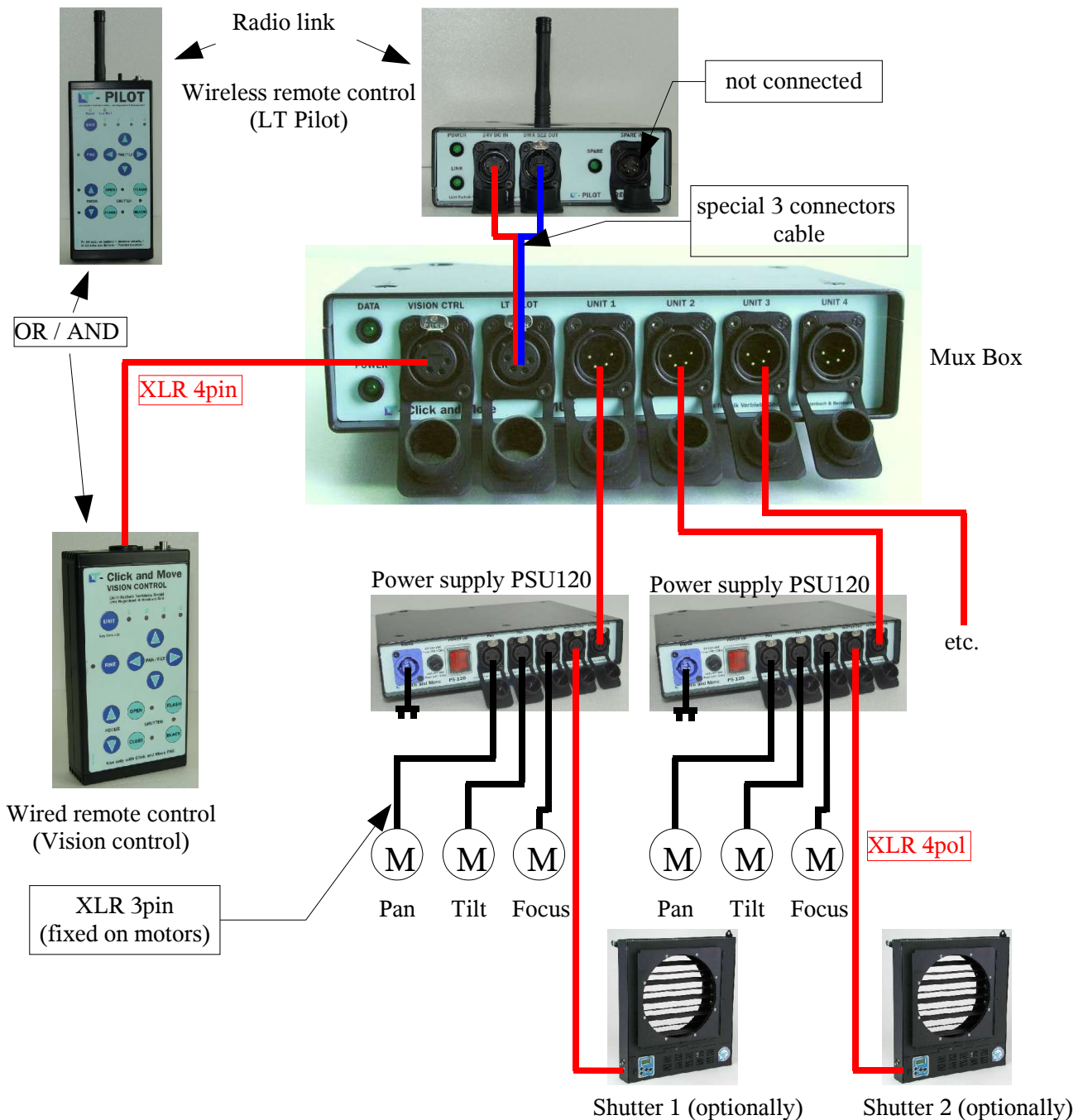


Make sure in this setup that the unit selector is set to 1! Otherwise it will not work!

Cabling with two or more systems (two or more lamps), wired remote control, and/or LT-Pilot wireless remote control:

For this alternative, the MuxBox is used. One or up to four systems can be connected. If the both remote control systems should be operated, the MuxBox must be used in any way, even if only one system is connected. In this case the wired remote control is the master controller, if the LT-Pilot should control the system(s) the wired control must be disconnected.

Please observe the users manual for LT-Pilot if used and the shutter.



Observe the maximum wire length of 120m from the power supply through the MuxBox to the Vision control (wired remote control).

User interface elements Vision Control



The **UNIT** – button selects the desired unit. One of the LEDs indicate the current unit.

The **UP, DOWN, LEFT** and **RIGHT** – buttons control pan and tilt.

The **FINE** button is for fine positioning of the lamp. A LED shows if the fine function is selected.

The **FOCUS** – buttons move the focus drive.

The **OPEN** – button opens (more light) the mechanical dimmer shutter if connected.

Locked if Blackout is selected.

The **CLOSE** – button closes (less light) the mechanical dimmer shutter if connected.

Locked if Blackout is selected.

The **FLASH** – button opens the shutter completely (flash).

The **BLACKOUT** – button closes the selected dimmer shutter completely. When pressing again the previous value will be restored. A LED signals the blackout state. The Flash function is possible when in blackout state ("flash prior blackout").

Key lock

The key lock prevents from unintended operation, e.g. the Vision control falls down. The key lock can be switched on or off by pressing the unit key for about two seconds. After a minute without pressing a key the key lock is switched on automatically. If the key lock is on the unit LEDs show a running light to indicate the key lock on state.

DMX addressing shutter

The following menu points must maybe programmed in the shutter. (See also corresponding user manual).

P01 = 8 DMX address shutter
P15 = 3 One address mode

Start up

Read carefully the the safety and operating instructions on page 5.

Mount the system(s) like illustrated on page 8 (continuing).

Cable the system(s) like illustrated on page 11 or 12.

Switch on the power supplies.

If mounted set the DMX addresses of the shutter(s).

Select an unit and position the lamp. If only one system is connected please select unit 1!

Technical data

Dimensions and Weight:

Set in case:	(length x width x height) 67 cm x 52 cm x 29 cm	30 kg
Pandrive:	(length x width x height) 32 cm x 15 cm x 33 cm	8,1 kg
Tiltdrive:	(length x width x height) 20 cm x 16 cm x 90 cm	2,4 kg
Focusdrive:	(length x width x height) 22 cm x 10 cm x 10 cm	2,4 kg

Speed:

Pandrive:	rough: ca. 18 Sec. for 90°, fine: ca. 38 Sec. for 90°
Tiltdrive:	rough: ca. 25 Sec. for 45°, fine: ca. 82 Sec. for 45°
Focus:	5 rpm

Pivot range:

Infinite because of mechanical friction clutch and electronical torque limiters.

Power consumption:

PSU120:	<u>Input:</u>	93..132 VAC 60Hz	fuse: 2A slow blow
	or	187..264 VAC 50Hz	fuse: 1A slow blow
	<u>Output:</u>	24 V DC max. 5A 120W	

Pinout:

3pol	Neutrik XLR	
	PIN1 Motor-	cross section min. 0,75 mm ²
	PIN2 not connected	cross section min. 0,25 mm ²
	PIN3 Motor+	cross section min. 0,25 mm ²
4pol	Neutrik XLR	
	PIN1 GND	cross section min. 0,75 mm ²
	PIN2 Data-	cross section min. 0,25 mm ²
	PIN3 Data+	cross section min. 0,25 mm ²
	PIN4 +24V DC	cross section min. 0,75 mm ²
5pol	Neutrik XLR	
	PIN1 screen	cross section min. 0,25 mm ²
	PIN2 Data-	cross section min. 0,25 mm ²
	PIN3 Data+	cross section min. 0,25 mm ²
	PIN4 not connected	cross section min. 0,25 mm ²
	PIN5 not connected	cross section min. 0,25 mm ²

Please note: To avoid electrical and magnetical radio interferences, please use only screened cables. This improves also a safe operation of the devices.

The DMX wires must be twisted pair and shielded separately.

Safety

Electronical torque limiters on all axis. Motors switch off at:

Pan: 1,45A
Tilt: 1,7A
Focus: 2.1A

Mechanical friction clutch on the pan axis.

When an axis runs into the electronical torque limiter, please choose the opposite direction to release it.

Malfunctions

No power supply (No LED is lighting:

- Mains cable connected and/or mains supply is okay?
- Cable connections okay?
- Fuse okay?

Replace fuses only with the correct values!

One or more axis do not work:

- Power supply okay?
- All cable connections okay?
- Concerning motor is on the correct plug?
- Correct unit selected? When using only one system , choose unit 1!
- All drives can work easily / not mechanical blocked?
- When the axis runs into the torque limiter, choose the opposite direction to release it!

If the error can not be recovered, please contact company Licht-Technik!

Warranty

The warranty for our products is 2 years. It comprises any repair of failures – free of charge – which can be proved to result from defects of fabrication.

Warranty expires when:

- the device was modified or attempted to be repaired
- damages were caused by the intervention of foreign persons
- damages are due to noncompliance with the operating instructions
- the device was connected to an incorrect voltage or incorrect type of current
- the device was incorrectly operated or when damages were caused by negligent handling or misuse

All maintenance and servicing works related to the product must be carried out by the company *Licht-Technik*. *Licht-Technik* shall not assume any liability for losses or damages of any kind being the results of inexperienced servicing.

Further information

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